REMARKS

Claims 1-6, 20-30 and 32-34 are pending. Applicants have amended claim 1 to more particularly point out their claimed invention. The amendment of claim 1 is supported by the Specification, for example, at page 18, lines 5-9. No new matter is introduced by this amendment.

All of the pending claims stand rejected. Applicants respectfully request reconsideration of the rejections based on the following comments.

Applicants acknowledge that an Examiner does not have the authority to change a decision by the Board of Patent Appeal. Applicants placed their comments on the record such that they would be in the file. The Examiner's conclusory reply to Applicants comments does not need to be further considered here. Applicants note that the amendments to the claims following the appeal have changed the issues as described below.

Rejections Over Jaskie And Bhargava

The Examiner rejected claims 1-6, 20-30 and 32-34 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,442,254 to Jaskie (the Jaskie patent) in view of U.S. Patent 5,455,489 to Bhargava (the Bhargava patent). The Jaskie patent was cited for disclosing phosphor particles with an average particle size less than about 100 nm. The Examiner asserted that the Jaskie patent teaches that a desired particle size range is within the skill in the art. The Bhargava patent is cited for disclosing metal oxide phosphor particles. However, Applicants maintain that the combination of the Jaskie patent and the Bhargava patent do not render Applicants' claimed invention prima facie obvious. In particular, the combined teachings of the cited references do not enable the practice of aspects of Applicants' claimed invention and the references teach away of other aspects of Applicants' claimed invention. Applicants respectfully request reconsideration of the rejections based on the following comments.

Claims 1-6 and 20-30

The Jaskie patent does not specifically describe metal oxide particles, as noted by the Examiner. The Bhargava patent only refers specifically to Y_2O_3 particles. However, neither reference describes how to produce particles with the claimed characteristics.

The Jaskie patent described formation of quantum confined particles using a miscelle technique, see column 6, line 62 to column 7, line 11. However, this approach is only described with respect to CdS. Applicants have presented clear and convincing evidence that the wet filtration approach described at column 7, lines 28-40 is not enabling. Furthermore, the Jaskie patent does not describe **metal oxide** particles for use in the wet filtration approach.

The Bhargava patent does not teach or suggest particles with the claimed uniformity. Thus, the Bhargava patent does not make up for the deficiencies of the Jaskie patent. The Bhargava patent described the formation of their particles at column 4, lines 45-63. In reviewing the abstracts of references 4-6 of the Bhargava patent, these references that include R. N. Bhargava as an author and refer to ZnS nanocrystals. Also, reference 8 is directed to CdS. Thus, the Bhargava patent does not refer to the formation of metal oxide particles. A copy of these abstracts and reference 8 from the Bhargava patent are attached for review by the Examiner.

Since the Jaskie patent and the Bhargava patent alone or together do not describe the formation of collections of metal oxide particles with the claimed properties, the combined disclosures of the Jaskie patent and the Bhargava patent do not render Applicants' claimed invention directed to **metal oxide particles** prima facie obvious. Thus, claims 1-6 and 20-30 are patentable over the cited references.

Claims 32-34

With respect to these claims, the Examiner admitted that the Jaskie patent does not teach particles with the claimed average particle size, but indicated that "discovering an optimum value of a result, effective variable involves only routine skill in the art." There are several faults with this reasoning. First, the references do not **motivate** such a modification. With respect to the Examiner's assertions, the cited references do not point to any type of optimization that would lead to the claimed values. Furthermore and very importantly, **both references teach away** from the claimed values.

The Jaskie patent teaches that the desired particles have a diameter of 10 nm (100 angstroms, i.e., Å) or less. See, for example, column 3, lines 52-57, column 4, lines 6-7 and column 6, lines 46-54 ("with the **maximum size** being approximately 100 Å," emphasis added). Similarly, the Bhargava patent teaches particles that have a diameter of 10 nanometers, i.e., 100 angstroms, or less. See, for example, the abstract, column 1, lines 63-67 and column 4, lines 64-67. Thus, **both** the Jaskie patent and the Bhargava patent **teach away** from phosphor particles with an average diameter of 15 nm to 100 nm.

Since the cited references alone or together do not teach, suggest or motivate the claimed invention, and since the cited references teach away from the claimed particle collections, the combined disclosures of the Jaskie patent and the Bhargava patent clearly do not render claims 32-34 prima facie obvious.

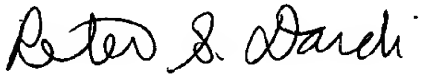
Since the combined disclosures of the Jaskie patent and the Bhargava patent do not render Applicants' claimed invention prima facie obvious, Applicants respectfully request withdrawal of the rejection of claims 1-6, 20-30 and 32-34 under 35 U.S.C. § 103(a) as being unpatentable over the Jaskie patent in view of the Bhargava patent.

CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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